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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,013	12/31/2003	Weinan Gao	CX03022USU (04CXT0006D)	5518
34408	7590	05/30/2006	EXAMINER	
THE ECLIPSE GROUP 10605 BALBOA BLVD., SUITE 300 GRANADA HILLS, CA 91344			VO, NGUYEN THANH	
			ART UNIT	PAPER NUMBER
			2618	

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/751,013	<b>Applicant(s)</b> GAO, WEINAN	
	<b>Examiner</b> Nguyen T. Vo	<b>Art Unit</b> 2618	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7, 10-14, 16-19 and 22 is/are rejected.
- 7) ☒ Claim(s) 4, 8, 9, 15, 20 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Objections*

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

**In this case, there are two claims 15 in the present application.**

**Misnumbered claims 15-21 have been renumbered 16-22.***Claim Rejections - 35*

### *USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 7, 12-14, 18-19, 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Herdey (7,043,206, cited by examiner).

As to claim 1, Herdey discloses in figure 1 a DC offset correction system for a direct-conversion receiver that includes a baseband section that has an input (see the baseband input BB\_in) and an output (see the baseband output BB\_out), the DC offset correction system comprising a DC feedback correction servo-loop in signal

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communication with the baseband section 100 (see the DC feedback servo-loop including numerals 106, 108 and 110 in figure 1), wherein the DC feedback correction servo-loop is coupled to both the input and output of the baseband section 100; and an attenuator 110 within the DC feedback correction servo-loop (in this case, the filter 110 reads on the attenuator as claimed because the filter 110 attenuates the frequency components that are outside of its low pass band). See also column 2 line 49 to column 3 line 34.

As to claims 2, 13, 19, 22, Herdey further discloses an integrator circuit 108 and a combiner circuit 102 as claimed.

As to claims 3, 7, 14, the attenuating characteristic of the low pass filter 110 reads on an attenuation coefficient as claimed.

As to claims 12, 18, the rejection to claim 1 as set forth above is herein incorporated. In addition, the attenuating characteristic of the low pass filter 110 reads on an attenuation coefficient as claimed.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5-6, 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herdey.

As to claims 5-6, 16-17, Herdey fails to disclose that the integrator circuit 108 is a RC filter as in claim 5, or a non-RC filter as in claim 6. The examiner, however, takes Official Notice that such a RC filter or a non-RC filter is known in the art. In addition, those skilled in the art would have recognized that the above conventional integrator circuits could be used in the integrator circuit 108 in Herdey without changing the spirit and scope of Herdey's invention. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above conventional RC or non-RC filters to Herdey, in order to improve flexibility in designing the DC offset correction system in Herdey.

6. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herdey in view of Ruelke (6,459,889, cited by examiner).

As to claims 10-11, Herdey fails to disclose a controller as claimed. Ruelke discloses a controller 162 in a DC feedback correction loop (see figure 1, column 5 lines 5-19). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above teaching of Ruelke to Herdey, in order to quickly and accurately correct the DC offset (as suggested by Ruelke at column 5 lines 5-19).

***Allowable Subject Matter***

7. Claims 4, 8-9, 15, 20-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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As to claims 4, 8, 15, 20, the prior art of record fail to disclose or render obvious that the attenuator 110 (see Herdey) includes a resistor and a Sallen-Key RC filter for generating an attenuation coefficient as specified in the claims.


**Conclusion**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T. Vo whose telephone number is (571) 272-7901. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571)272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen Vo

  
5-16-2006

**NGUYEN T. VO**  
**PRIMARY EXAMINER**